

Chippewa County High Risk Erosion Area Update

Water Resources Division
2015

**Part 323,
Shorelands Protection and Management,
of the Natural Resources and
Environmental Protection Act,
1994 PA 451, as amended**

Great Lakes Shorelands
Administrative Rules
281.21 - 22

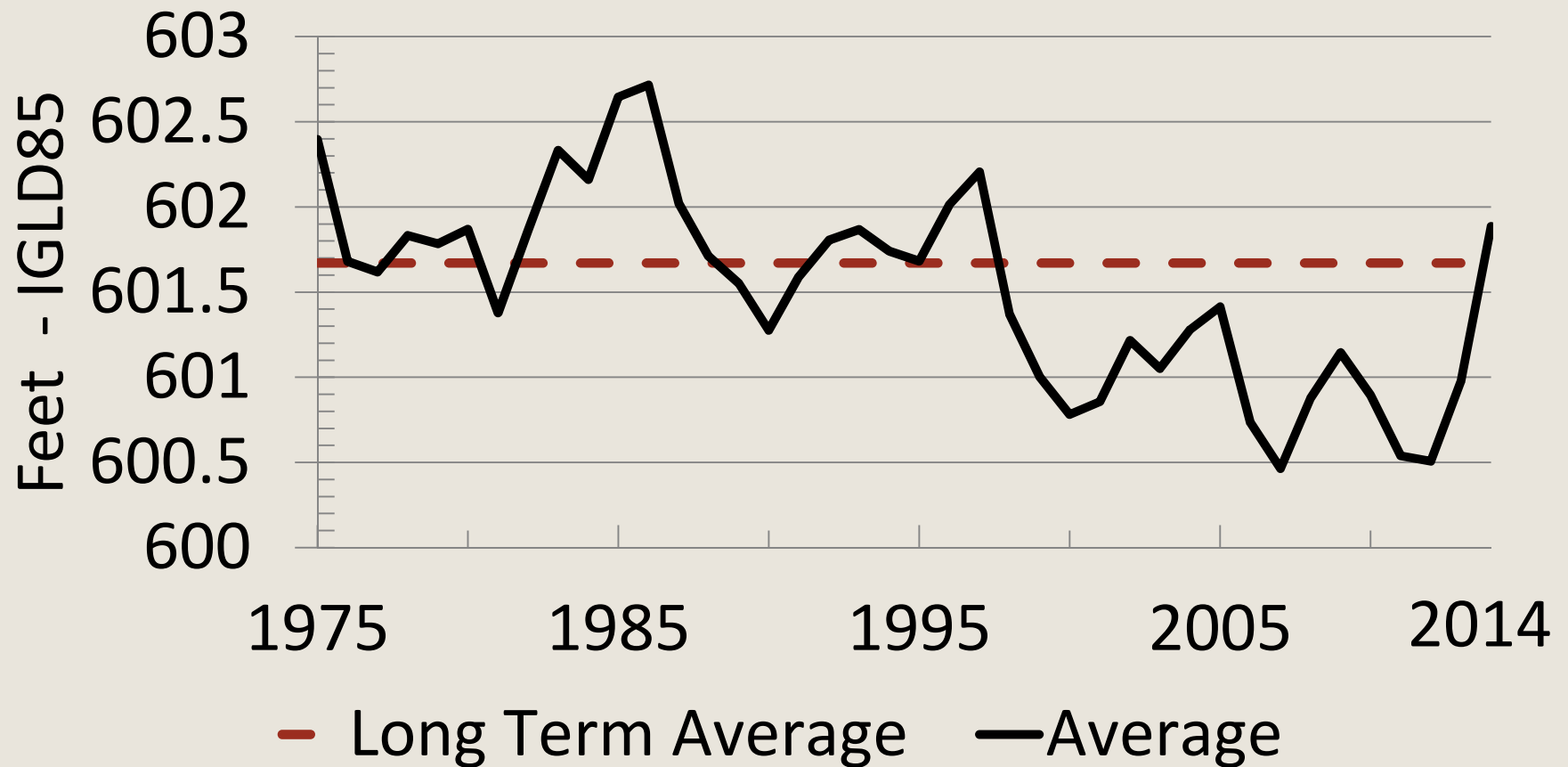


Erosion Happens

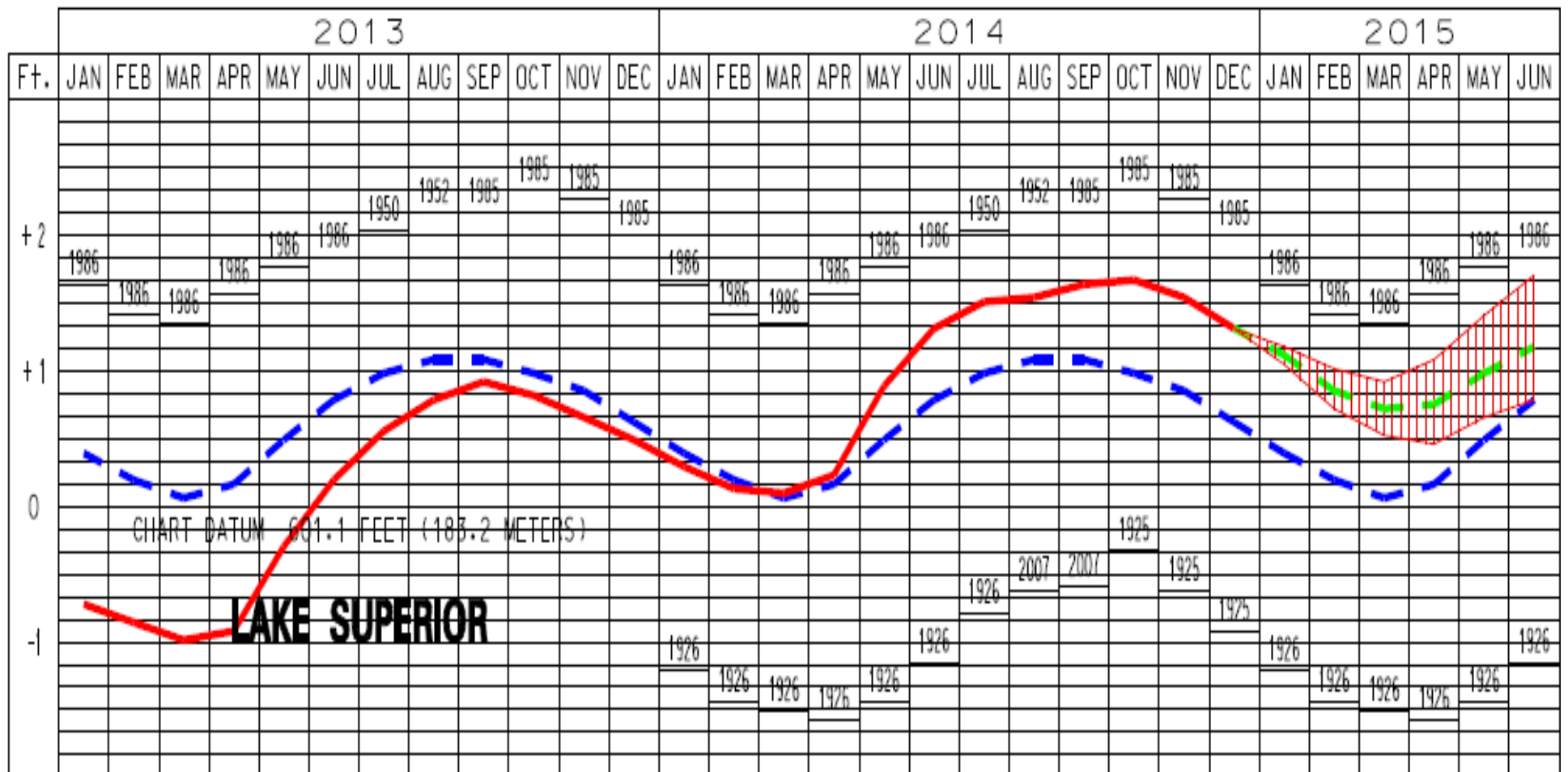


Water levels change

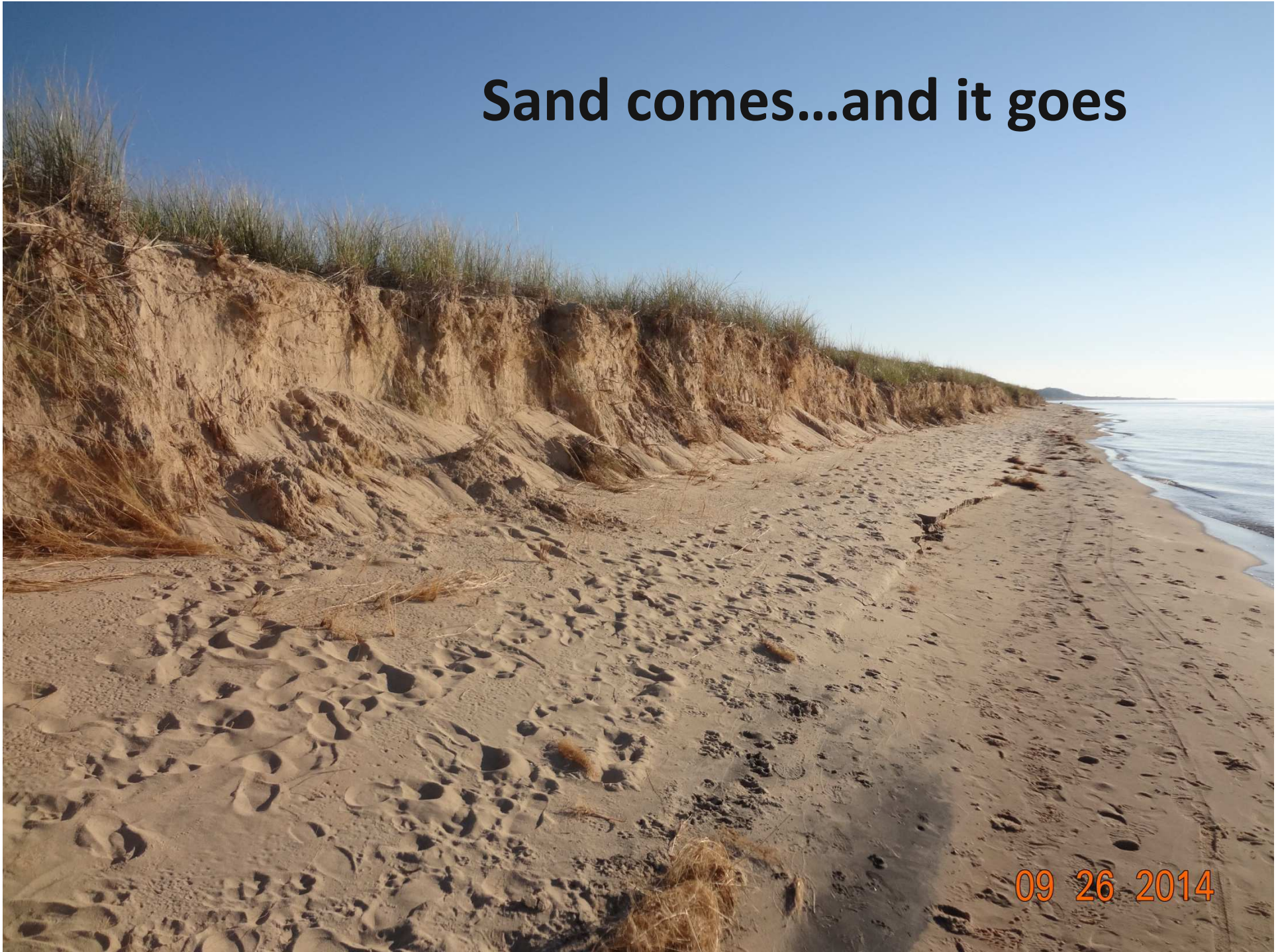
Lake Superior



USACE Projected Water Level January 2015 Lake Superior



Sand comes...and it goes



09 26 2014

Storms



On the Edge



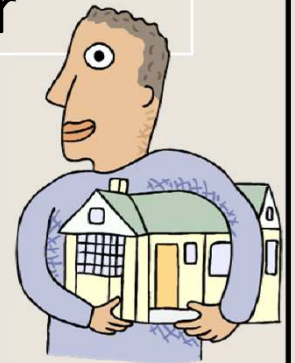
What is a High Risk Erosion Area?

- Erosion occurring an average of 1 foot/year over a minimum period of 15 years
- DEQ studies movement of the landward edge of erosion



Chippewa County Erosion Rates

Whitefish Township	8.3 feet /year
Bay Mills Township	1.1 feet/year
Superior Township	< 1 foot/year
Soo Township	2.5 feet/year

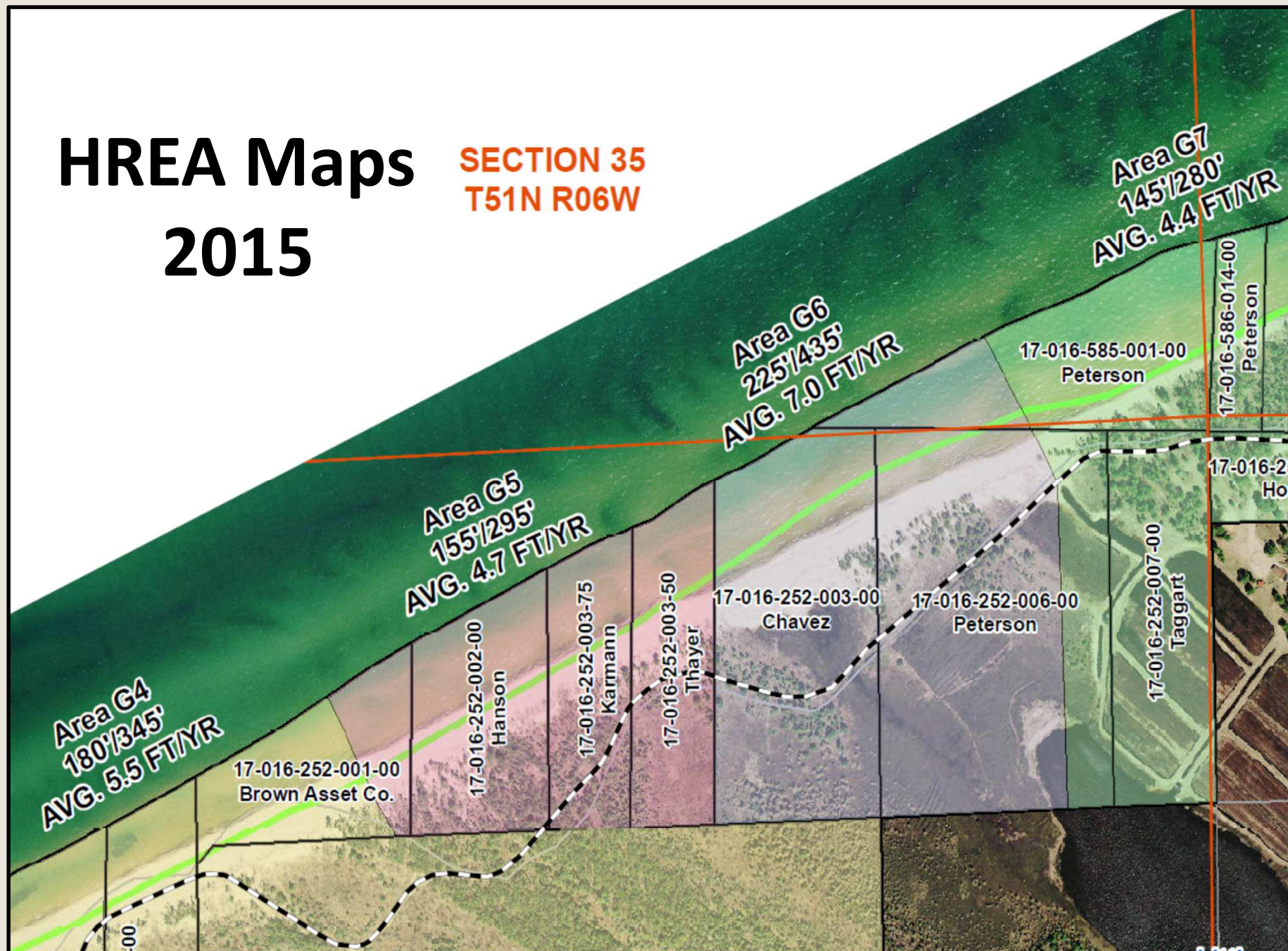


Recession Rate Studies



HREA Maps 2015

SECTION 35
T51N R06W



Designation Timeline

- ✓ **Letter to property owners and officials**
- ✓ **Public meetings**
- ✓ **Meet with local officials**
- ✓ **Comments, questions, informal appeals**
- ✓ **Formal designation letters**
- ✓ **Administrative appeals**



HREA Permit Not Required for

- Open decks, patios, or stairs
- Building 225 sq ft or smaller, not on permanent foundation
- Unenclosed, uncovered swimming pools
- Routine maintenance
- Restoration of structure if cost is less than 60% of replacement value

Building on Designated Property

- Construct or relocate a permanent building
- Construct an addition
- Construct a detached structure larger than 225 sq ft, or on a permanent foundation
- Install or replace a septic system



Readily-Moveable Structure Criteria

- First floor foundation: 3500 sq ft or less
- Garage: 676 sq ft or less
- Foundation: basement, crawl space, or pilings
- Above foundation walls: stud frame or whole log
- Exterior Siding: wood, vinyl, cement board, brick, cultured stone or stucco
- No more than 4 living units
- Sufficient access for relocation



Non-Readily Moveable Structures

- Structure does not meet RMS criteria
- Septic systems
- Existing structures which do not meet structural criteria may be classified as RMS if:
 - cost of relocation landward of setback is not more than 25% of replacement cost

Erosion Hazard Line

- Depends on site characteristics
- Setbacks measured from either
 - top of lakeward facing slope, or
 - landward edge of active erosion.
 - Elevation Contour – Lake Superior 604.4 ft
 - Never measured from water's edge

Edge of active erosion located at top of bluff

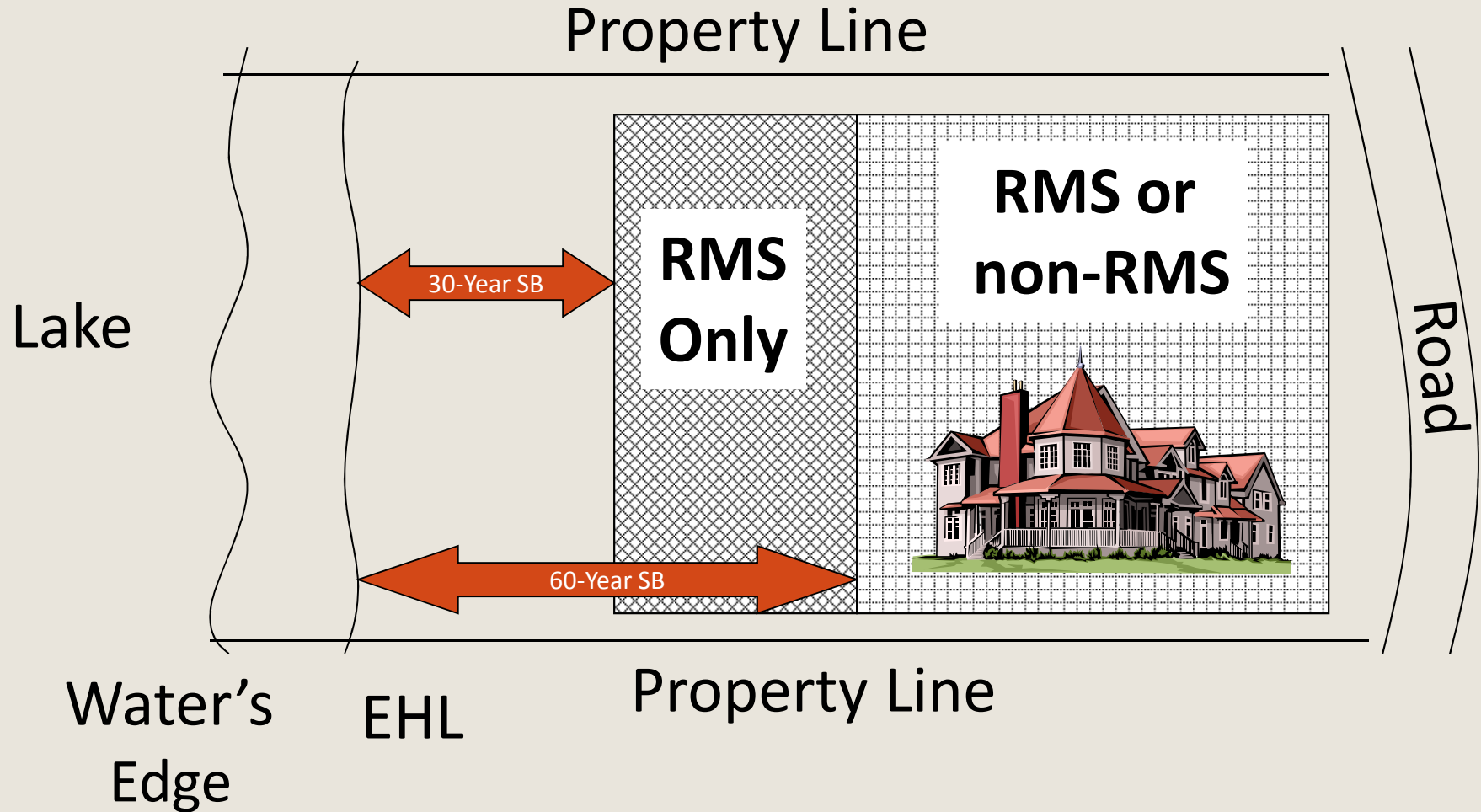


Erosion Hazard Line



- Landward edge of active erosion is lakeward of top of the bluff
- Setback may be different from PRD - dependent on bluff height and slope of bluff face.

Locating a New Structure



The Permit Process

- Considers the site and the proposed project.
- Permit applications are available at www.michigan.gov/jointpermit
- Field staff will site inspect and make permit decision within 60 days from receipt of complete application.

Summary

- Erosion happens
- Shorelines change
- Recession rates identify a hazard
- Setbacks are a planning tool
- DEQ permit
- www.mi.gov/shorelands